INSTALLATION

DX8100 Series
Digital Video Recorder

SCSI Card and External Video Storage

C3648M (7/08)

Contents

List of Tables

List of Illustrations

Important Safety Instructions

The DX8100-ISCI SCSI card must be installed inside the DX8100 chassis. To do so, the DX8100 must be taken offline and turned off before starting the upgrade process. Before continuing the upgrade procedure, read these safety instructions.

1. Read the *Important Safety Instructions* that came with the DX8100. You can access this document at *www.Pelco.com*. Navigate to Products > Control Site Equipment > Video Recorders > Digital Video Recorders > DX8100 Series Digital Video Recorders > Documents.
2. The security surveillance service provided by the DX8100 is interrupted when it is taken offline.
3. The unit must be shut down and turned off to install the DX8100-ISCI SCSI card.
4. Unplug the power cord from the wall socket, and then unplug it from the rear of the DVR.

⚠ **WARNING:** It is critical that the DX8100 be unplugged for your safety. You must remove the power cord because electrical current continues to flow through the unit even when it is off.

5. Only use attachments/accessories specified by the manufacturer.
6. Make sure you protect the unit and its components from electrostatic discharge (ESD).
7. The currently installed data drive(s) might contain recorded data. If you must remove a data drive, label the drive to make sure it is reinstalled in the same location.

The product and/or manual may bear the following marks:


This symbol indicates that dangerous voltage constituting a risk of electric shock is present within this unit.


This symbol indicates that there are important operating and maintenance instructions in the literature accompanying this unit.

CAUTION:
RISK OF ELECTRIC SHOCK. DO NOT OPEN.

Regulatory Notices

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

RADIO AND TELEVISION INTERFERENCE

This equipment has been tested and found to comply with the limits of a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However there is no guarantee that the interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

You may also find helpful the following booklet, prepared by the FCC: "How to Identify and Resolve Radio-TV Interference Problems." This booklet is available from the U.S. Government Printing Office, Washington D.C. 20402.

Changes and Modifications not expressly approved by the manufacturer or registrant of this equipment can void your authority to operate this equipment under Federal Communications Commission's rules.

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

Introduction

Welcome to the external video storage upgrade for the DX8100 Series digital video recorder (DVR). The external video storage upgrade includes the DX8100-ISCI SCSI card and the DX8100HDDI (Infortrend® EonStor® A12U-G2421). These two items are ordered and shipped separately. The DX8100HDDI includes a 3.3 ft (1 m) SCSI cable and other parts for its installation. Before you upgrade the system, familiarize yourself with the instructions in this manual.

NOTE: The DX8100HDDI does not send operating status information or system alerts to the DX8100. If used, the DX8100HDDI client application should not be installed on the DX8100 server.

ABOUT THE EXTERNAL STORAGE UPGRADE

The DX8100HDDI external storage upgrade increases DX8108 or DX8116 storage capacity beyond the 3.0 TB internal storage capacity. Table A lists the available storage upgrade options.

Table A. External Video Storage Upgrade Options

Part Number	Number of 750 GB Drives	Storage in GB	
		Internal	Video
DX8100HDDI-2250	3	2250	1500
DX8100HDDI-4500	6	4500	3750
DX8100HDDI-6750	9	6750	6000
DX8100HDDI-9000	12	9000	8250

Parts List and Tools

DX8100-ISCI SCSI CARD

Qty	Description
1	DX8100-ISCI SCSI card
1	ESD Grounding wrist strap
1	DX8100-ISCI SCSI Card and DX8100HDDI Installation manual (C3648M)

To install the DX8100-ISCI SCSI card, you will also need a nonmagnetic Phillips screwdriver #1, a properly grounded ESD wrist strap and mat, and four small containers (optional) to store screws.

DX8100HDDI EXTERNAL VIDEO STORAGE

Qty	Description
1	DX8100HDDI unit
1	DX8100HDDI supplied accessories kit, includes:
6	Power cords (2 USA standard, 2 European standard, and 2 UK standard; depending on locality, the unit might include only USA, only European, only UK, or all types)
1	VHDCI-to-VHDCI SCSI round cable
1	RS-232-C cable (stereo mini jack to DB-9)
1	Null modem
50	Screws, 6-32 x 0.20-inch, Phillips, flat head
4	Screws, 10-32 x 1.25-inch, Phillips, pan head
4	Screws, M5 x 30 mm, Phillips, pan head
4	Screws, M6 x 30 mm, Phillips, pan head
1	Resource disc
1	Quick Installation Guide (Infortrend)

OTHER DX8100 OPTIONAL ACCESSORIES

The DX8108 base unit includes an 8-channel capture card and the DX8116 base unit includes a 16-channel capture card.

NOTE: The DX8100-ISCI SCSI card option is not supported for DX8124 or DX8132 models.

Before upgrading the DX8100, refer to Table B, for a list of other DX8100 accessories that can be installed with the external video storage. Items not listed are not supported in combination with the DX8100-ISCI SCSI card and DX8100HDDI options.

Table B. Optional Accessories

Part Number	Description
DX8108-AUD	The DX8108-AUD audio card is installed on the 8-channel capture card. The DX8108-AUD audio card can also be installed on a 16-channel capture card. Only audio inputs 1–8 are available for recording. Audio channels 9–16 can be configured, but audio data is not recorded.
DX8116-AUD	The DX8116-AUD audio card is installed on the 16-channel capture card. The DX8116-AUD audio card cannot be installed on an 8-channel capture card. The DX8124 supports 8, 16, or 24 audio channels. The DX8132 supports 8, 16, 24, or 32 audio channels.
DX8108-MUX	DX8100 8-channel multiplexed analog output display card.
DX8116-MUX	DX8100 16-channel multiplexed analog output display card.
DX8100-512RAM	DX8100 memory upgrade from 512 MB to 1 GB.
DX81HDD250KIT	DX8100 SATA 250 GB upgrade.
DX81HDD500KIT	DX8100 SATA 500 GB upgrade.
DX81HDD750KIT	DX8100 SATA 750 GB upgrade.
KBD300A	Universal keyboard (requires KBDKIT).
KBDKIT (-X)	Remote keyboard wiring kit (X model for 220 VAC).
VSI-PRO	AVE™ video serial interfaces for ATM/POS.
Regcom	AVE RS-485 network system unit.
Hydra	AVE RS-485 network system control unit.
DX8100DSP-W2K	Dual display card and version 1.2 software upgrade for Windows® 2000.
DX8100DSP-XP	Dual display card and version 1.2 software upgrade for Windows XP Embedded.
DX81SWV12W2K	Software only upgrade to version 1.2 Windows 2000.
DX81SWV12XPE	Software only upgrade to version 1.2 Windows XP Embedded.

DX8100-ISCI SCSI Card Installation

NOTE: When ordered together, the DX8100 and DX8100HDDI units come preconfigured from the factory. The DX8100-ISCI SCSI card is already installed and the units are ready for installation. Proceed to *Installing a New DX8100 and DX8100HDDI System* on page 15.

If you are upgrading an existing DX8100 System, perform the following steps.

PREPARING THE SCSI CARD FOR INSTALLATION

1. Unpack the DX8100-ISCI SCSI card kit.
2. Verify that you have all the necessary components and tools (refer to *Parts List and Tools* on page 7).
3. Shut down the unit. Refer to the DX8100 Installation manual (C2629M), Operation/Configuration manual (C2630M), or DX8100 server online Help.
4. Unplug the power cord from the wall socket.

⚠ **WARNING:** It is critical that the unit be unplugged for your safety. You must remove the power cord first because current continues to flow through the DX8100 even when the unit is turned off. Unplug the power cord from the wall socket, then unplug it from the rear of the DVR.

5. Then, remove the power cord from the back of the DX8100.

Figure 1. Removing the Power Cord

6. Disconnect any cables or connections that may restrict access or interfere with the removal of the unit.
7. If mounted in a rack, unscrew the fasteners that secure the unit in the rack and carefully lift the unit out of the rack. Two people may be required for this step.
8. Place the DX8100 on a flat surface with ample workspace. Make sure the area provides full access to the unit's internal components.

OPENING THE CHASSIS

⚠ WARNINGS:

- Make sure the unit is turned off and you are wearing a properly grounded ESD wrist strap before attempting to open the chassis cover.
- The chassis assembly includes parts with sharp edges. To avoid injury, use caution when working in and around the DX8100 chassis and components.

1. Make sure you protect the unit and its components, which are susceptible to damage from improper handling and ESD. Refer to the Safe Handling of Hard Drives document (C2668M) for more information.
2. Use a Phillips screwdriver to remove the chassis cover (refer to Figure 3):
   a. Remove the top two screws on the left and right side panels of the DX8100.
   b. Remove the four silver screws (along the top of the unit) that fastens the cover to the back of the unit.
   c. Carefully remove the chassis cover by sliding it back and up. Set aside the cover.

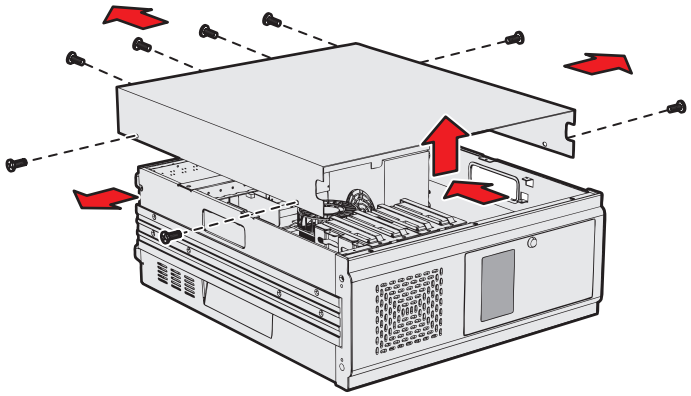

Figure 2. Removing the Chassis Cover

UNDERSTANDING THE COMPONENT LAYOUT

Figure 3 and Table B provide information about the DX8100's slot assignments and major components. (Slots on the motherboard are labeled differently.)

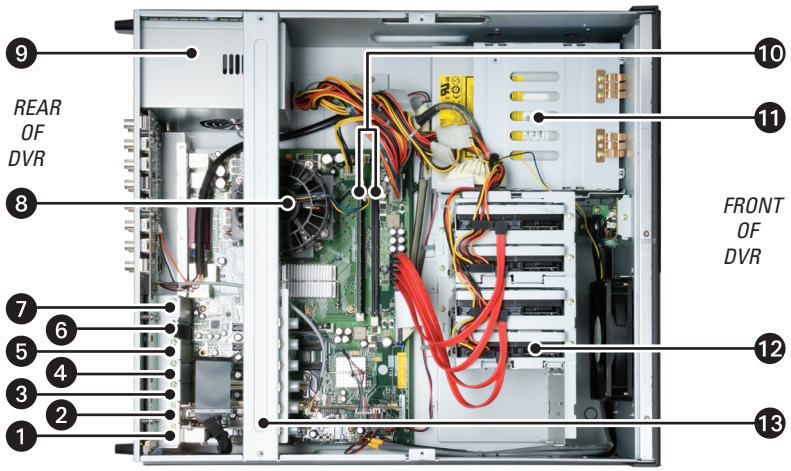

Figure 3. Interior Layout

1. **Slot 1:** PTZ card installed in PCI connector
2. **Slot 2:** Capture Card installed in PCI connector
3. **Slot 3:** PCI connector
4. **Slot 4:** x1 PCI Express connectors
5. **Slot 5:** x1 PCI Express connectors
6. **Slot 6:** Dual Display Card (x16 PCI Express connector)
7. **Slot 7:** Optional Expansion Unit I/O card
8. **CPU**
9. **Power Supply**
10. **DIMM Sockets (RAM)**
11. **DVD-RW**
12. **System Disk and Data Disk Mounting Basket**
13. **Rear Cross-Brace**

MOVING THE MAIN CAPTURE CARD

In the DX8108 and DX8116 base DVRs, the main capture card is installed in slot 2. To install the DX8100-ISCI SCSI card, the main capture card must be moved from slot 2 to slot 3. The DX8100-ISCI SCSI card must be physically installed in slot 2.

To move the main capture card from slot 2 to slot 3:

1. Prepare the main capture card for removal (refer to Figure 4):
   a. Remove the rear cross-brace.
   b. Remove the slot cover for slot 3 and retain the screw.
   c. Remove the bracket screw that secures the main capture card in slot 2.
   d. Disconnect the 32-pin ribbon cable.
   e. Disconnect the 5-wire TV/Audio cable and lay the cable over the DX8100 I/O Card.
   f. Disconnect the 7-wire TV/Audio cable.
   g. Disconnect the 2-wire audio cable.

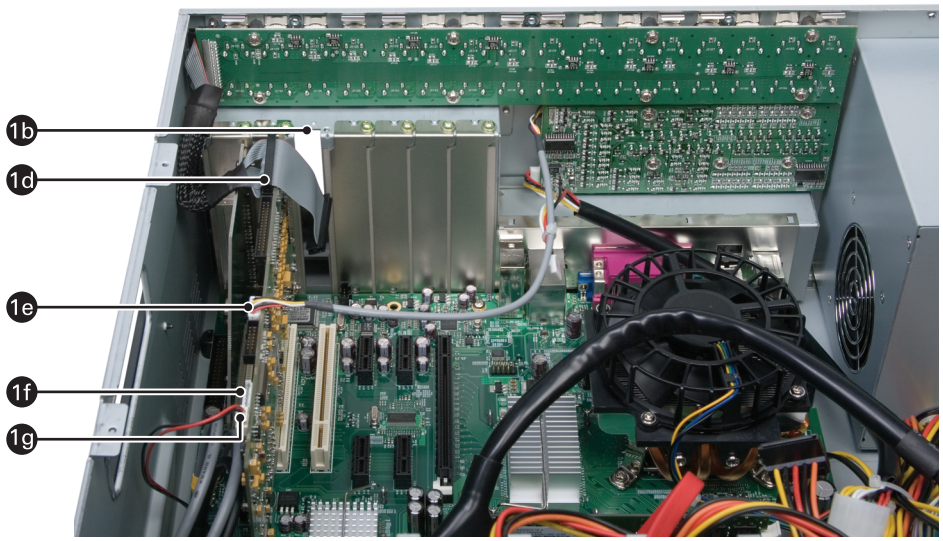

Figure 4. Preparing the Main Capture Card for Removal

2. Move the main capture card (refer to Figure 5):
   a. Remove the capture card from slot 2 and firmly seat the capture card in the PCI connector for slot 3.
   b. Secure the capture card bracket with the screw.
   c. Reconnect the 5-wire TV/Audio cable.
   d. Reconnect the 7-wire TV/Audio cable.
   e. Reconnect the 2-wire audio cable.

   NOTE: You will reattach the 32-pin ribbon cable after you install the SCSI card.

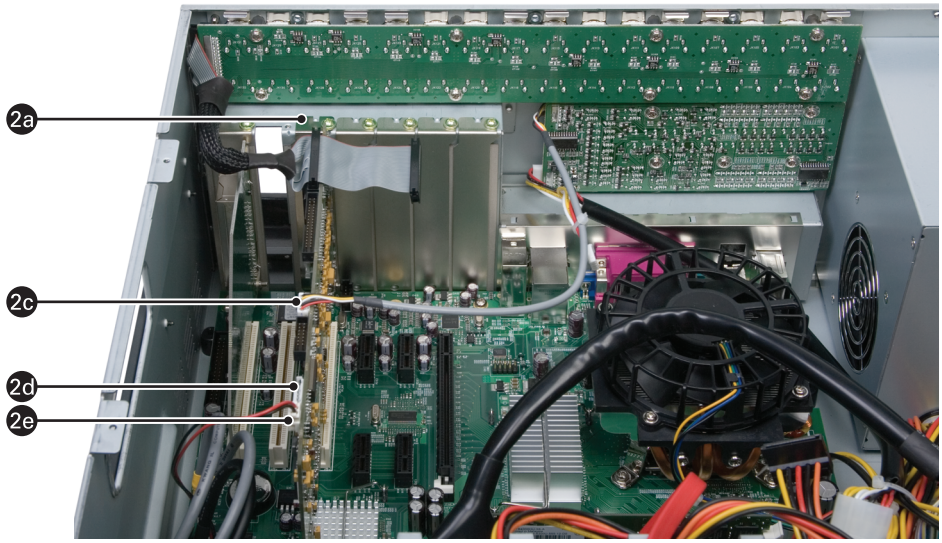

Figure 5. Moving the Main Capture Card

INSTALLING THE SCSI CARD

To install the DX8100-ISCI SCSI card:

1. Make sure the main capture card is installed in slot 3. Refer to *Moving the Main Capture Card* on page 12.
2. Install the SCSI card into slot 2 (refer to Figure 6):
   a. Firmly seat the DX8100-ISCI SCSI card in the PCI connector for slot 2.
   b. Secure the DX8100-ISCI SCSI card bracket with the screw removed from slot 3.
   c. Reconnect the 32-pin ribbon cable to the first 32-pin connector (on the main capture card) in slot 3.
3. Replace the rear cross-brace.

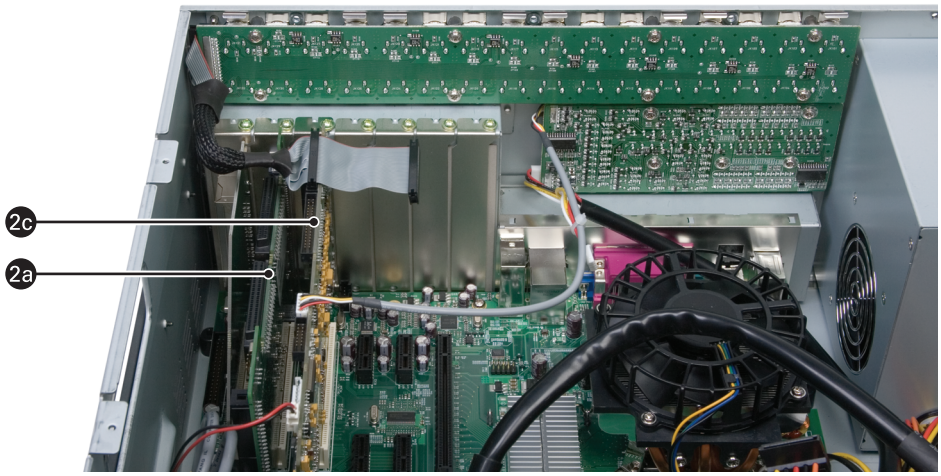

Figure 6. Installing the SCSI Card

REASSEMBLING THE UNIT

1. Replace the chassis cover using the screws you removed from the sides and rear of the unit (refer to Figure 7).

Figure 7. Replacing the Chassis Cover

2. Attach the silver product label that came with your upgrade kit to the inside of your DVR's front door.
   a. Remove the paper backing from the product label.
   b. Carefully place the label, adhesive-side down, on a free section of the inside of the door.
   c. Press down firmly to ensure that the label properly adheres to the inside of the door.

NOTE: In the event that your unit or its components require service, specific labels must be present and appropriately affixed to the unit's door. Pelco Product Support personnel use these labels to identify the exact components installed in your system. A separate product label is required for each upgrade component installed on the DX8100.

3. Reinstall the unit in a rack enclosure (if necessary), and reconnect all cables and peripheral equipment you removed earlier.

The final step is to install the DX8100HDDI.

Installing a New DX8100 and DX8100HDDI System

When ordered together, the DX8100 or DX8116 and DX8100HDDI units come preconfigured from the factory. The DX8100-ISCI SCSI card is already installed and the units are ready for installation.

INSTALLING THE UNITS

NOTES:

- When installing the DX8100 and DX8100HDDI units, make sure they are close to one another. The SCSI cable is 3.3 ft long (1 m) and must easily connect both units.
- Both units are very heavy. Two people are required to lift and carry each unit.
- For rack mount instructions, refer to the installation manual for each unit.

Install the units as follows:

1. Install the DX8100. Refer to the DX8100 Series Digital Video Recorder Installation manual (C2629M).
2. Install the DX8100HDDI. Refer to the Infortrend EonStor A12U-G2421 Installation and Hardware Reference Manual (ES_A12U_A08U-G2421_HMN), which is located on the DX8100HDDI resource disc.

Once installed, refer to *Installing the DX8100HDDI Drive Trays*.

INSTALLING THE DX8100HDDI DRIVE TRAYS

The DX8100HDDI has 12 drive bays, one for each drive tray. Figure 8 shows the number for each drive bay.

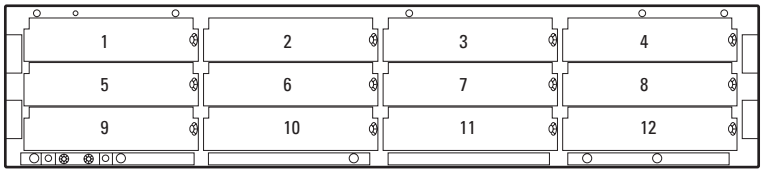

Figure 8. DX8100HDDI Drive Bays

Each hard disk drive (HDD) is installed in its drive tray at the factory. Some drive trays may not have drives. All trays must be installed in the DX8100HDDI to maintain proper airflow inside the unit and avoid overheating.

To install the drive trays:

1. Unpack the drive trays.

   NOTE: Each drive tray (and HDD) is labeled. The label represents the number of the drive bay where the drive tray must be installed.

2. Flip the retention latch on the front handle, and then open the handle (refer to Figure 9). This gives you access to the left (1, 5, and 9) and right (4, 8, and 12) drive bays.

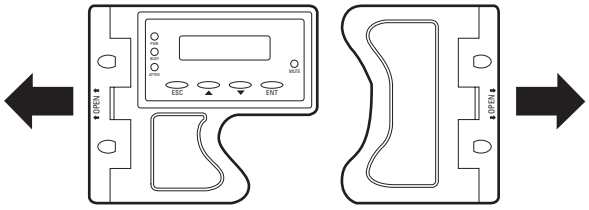

Figure 9. Front Panel Retention Latches

3. Install the drive trays:
   a. On the DX8100HDDI front panel, place the drive tray 1 release button in the unlocked position (refer to Figure 10).

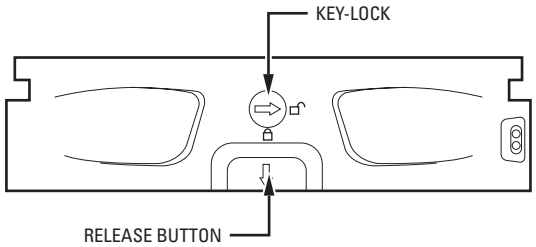

Figure 10. Drive Tray Key-Lock in Unlocked Position

   b. Press the release button (refer to Figure 11). The front flap opens.

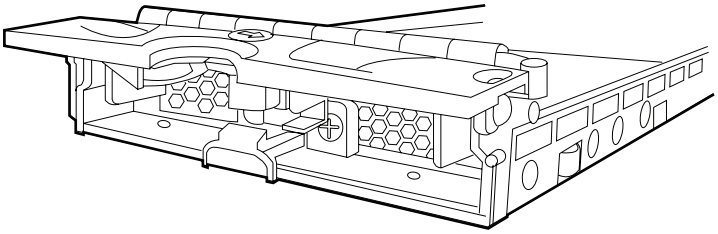

Figure 11. Opening the Drive Tray Door

   c. Using the label on the drive tray, install the drive tray in the drive bay labeled with the same number (refer to Figure 8 on page 15).

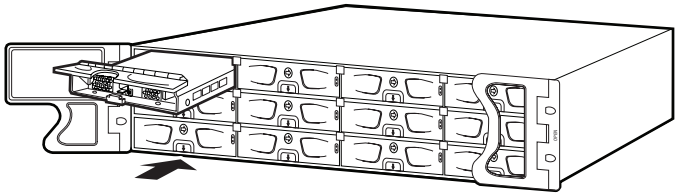

Figure 12. Inserting the Drive Tray

   d. Gently shut the drive tray door, and then return the release button to the locked position (refer to Figure 10).
4. Repeat step 3 to install all other drive trays in numerical order.
5. Verify that each drive tray is installed in the correct drive bay.
6. Return the retention latch to its closed position (refer to Figure 9 on page 15).

CONNECTING THE DX8100HDDI TO THE DX8100

Refer to Figure 13 to perform the following steps:

1. Plug one end of the VHDCI-to-VHDCI SCSI cable into port CH 1/A on the DX8100-ISCI SCSI card.
2. Plug the other end of the SCSI cable to the DX8100HDDI CH0-In connector.
3. Insert both DX8100HDDI power supply cords in to the unit and plug the cords in to a wall socket.

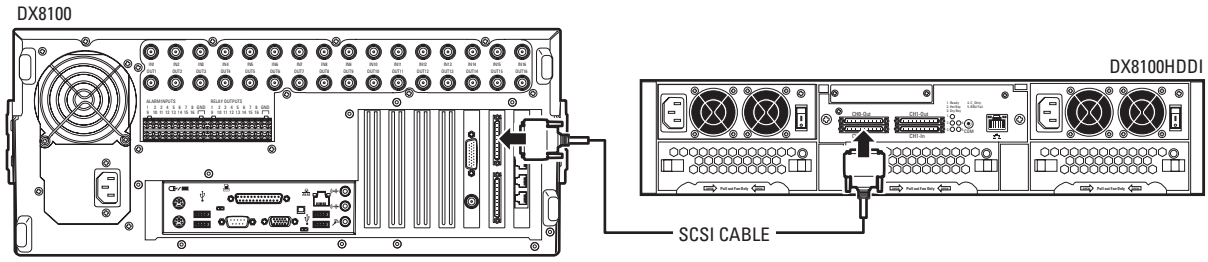

Figure 13. DX8100 to DX8100HDDI SCSI Connection

TURNING ON THE DX8100HDDI AND THE DX8100

1. Turn on both DX8100HDDI power supplies (refer to Figure 13) and verify that "Ready" is displayed on the LCD.

   NOTE: You must wait until the DX8100HDDI displays the Ready status before turning on the DX8100.

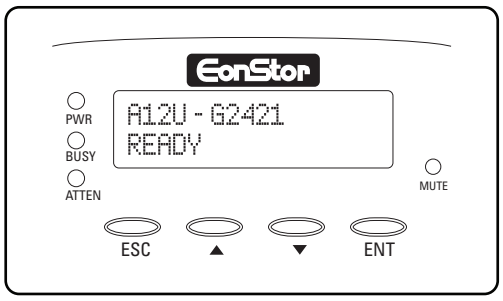

Figure 14. DX8100HDDI in Ready Status

2. Turn on the DX8100. The application starts automatically and begins recording data to the DX8100's internal storage (unless disabled) and to the DX8100HDDI.

Upgrading the DX8100 with the DX8100HDDI

The DX8100HDDI upgrade comes preconfigured from the factory and does not need to be configured during the installation process. However, you need to configure the DX8100 to recognize and work with the newly installed DX8100HDDI.

NOTES:

- When installing the DX8100HDDI, make sure it is close to the DX8100. The SCSI cable must easily connect to both units.
- Both units are very heavy; two people are needed to lift and carry each unit.

HARDWARE INSTALLATION

1. If necessary, shut down the DX8100:
   a. Select File > Exit. The "Shut down" dialog box appears.
   b. Click "Shut down." The DX8100 shuts down.
2. Install the DX8100 ISCI SCSI card if not already installed (refer to *DX8100-ISCI SCSI Card Installation* on page 9). Install the DX8100HDDI. Refer to the Infortrend EonStor A12U-G2421 Installation and Hardware Reference Manual (ES_A12U_A08U-G2421_HMN), which is located on the DX8100HDDI resource disc.
3. Install the DX8100HDDI drive trays (refer to *Installing the DX8100HDDI Drive Trays* on page 15).
4. Connect the SCSI cable from the DX8100HDDI to the DX8100 (refer to *Connecting the DX8100HDDI to the DX8100* on page 17).
5. Turn on both DX8100HDDI power supplies and wait for the LCD on front panel to display the Ready status.
6. Turn on the DX8100.

CONFIGURING THE DX8100

7. Exit the DX8100 application and log on to the Windows operating system:
   a. Log on to the DX8100.
   b. From the DX8100 menu bar, choose File > Exit. The "Shut down" dialog box appears.
   c. Click "Exit to Windows."
   d. Click OK. The "Log On to Windows" dialog box appears.
   e. Enter the Windows password and then click OK. The system logs you on to the Windows operating system.
8. Start the Computer Management Utility:
   a. Go to Start > Run. The Run dialog box appears.
   b. In the Open drop-down box, type **compmgmt.msc**.
   c. Click OK.

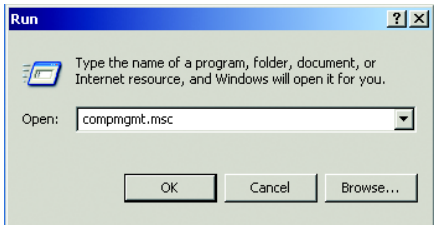

Figure 15. Starting the Computer Management Utility

9. When the Computer Management window appears, click Disk Management.
10. If the "Initialize and Convert Disk Wizard" appears, perform the following steps. Otherwise, go to step 11.

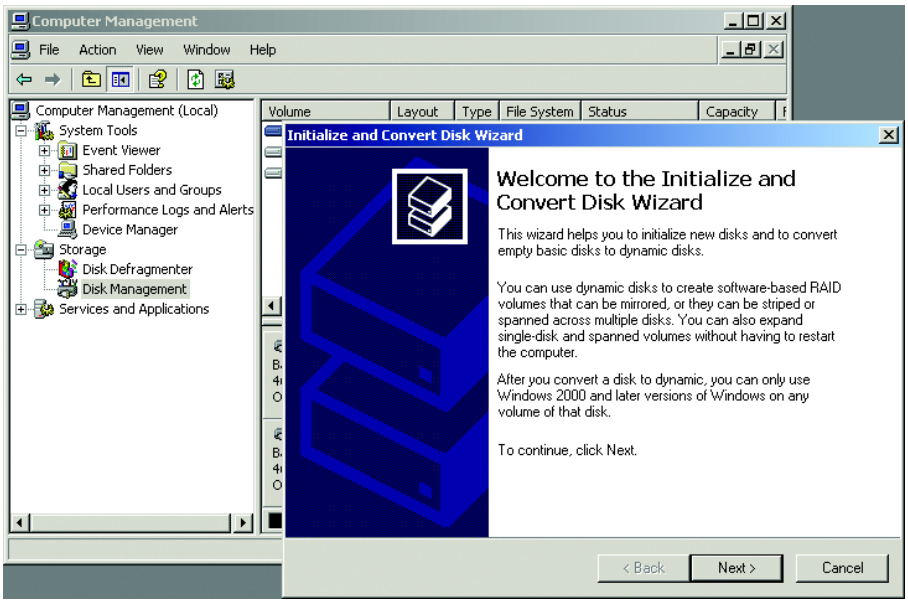

Figure 16. Initialize and Convert Disk Wizard

a. Click Next, and make sure all disks are selected.

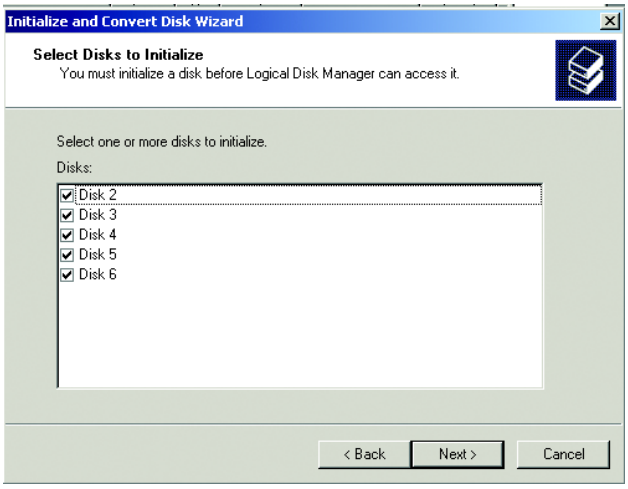

Figure 17. Verifying All Disks are Selected

b. Click Next again. All disks should still be selected.
c. Click Next, and then click Finish.

d. Disk status appears in the contents pane. For this example, there are five unallocated dynamic drives. Perform the following steps:

(1) Right-click a disk in the Disk status pane (one that is labeled Dynamic). A shortcut menu appears.

(2) Select "Convert to Basic Disk."

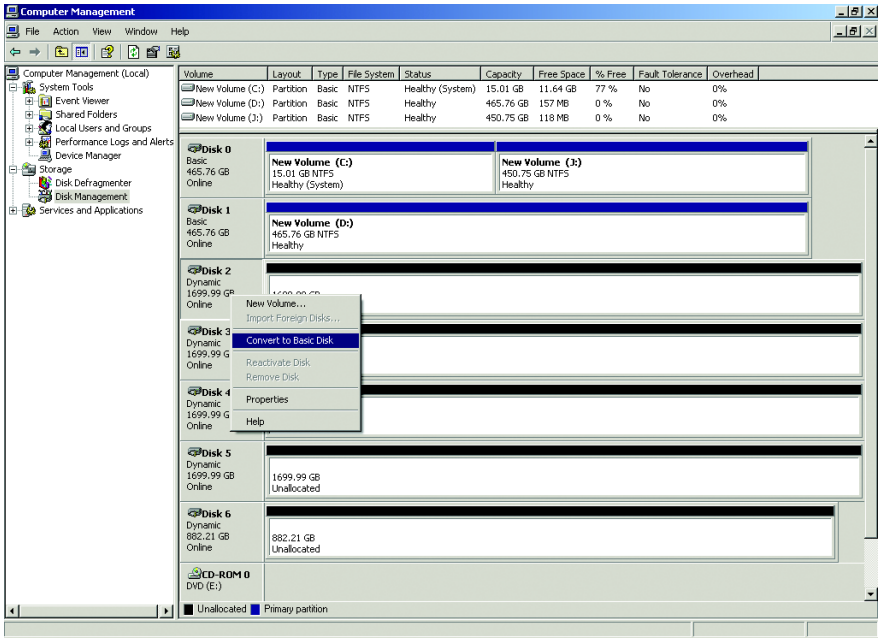

Figure 18. Unallocated Dynamic Drives

e. Repeat step 10d until all drives are converted to the Basic status.

11. A blue status bar represents formatted disks with active partitions and a black status bar represents unformatted disks (unallocated). For example, Figure 19 shows four formatted disks (blue status bar), five partitions, and three unformatted disks (black status bar). Make a list of the original active partitions (blue status bar). This list will be needed later in the procedure when you are instructed to delete the original active partitions.

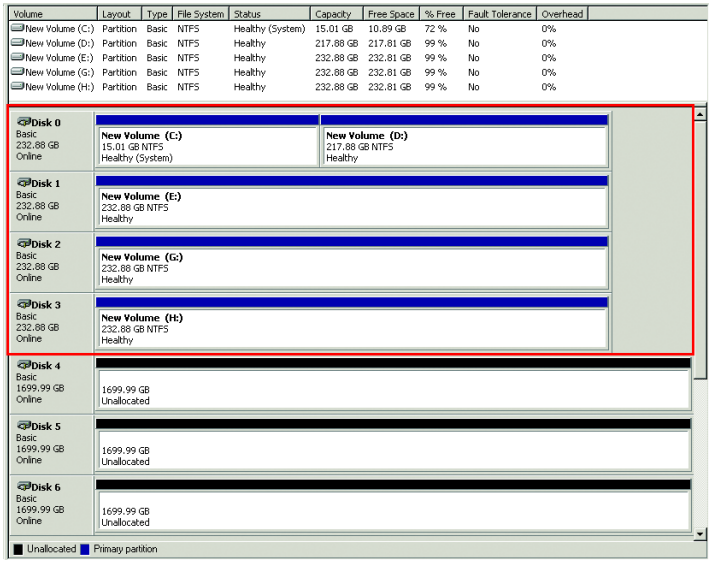

Figure 19. Drives Converted to Basic Disk

a. Configure any unallocated drives.

(1) Right-click the first unformatted disk in the contents pane (labeled Unallocated). A shortcut menu appears.

(2) Click New Partition.

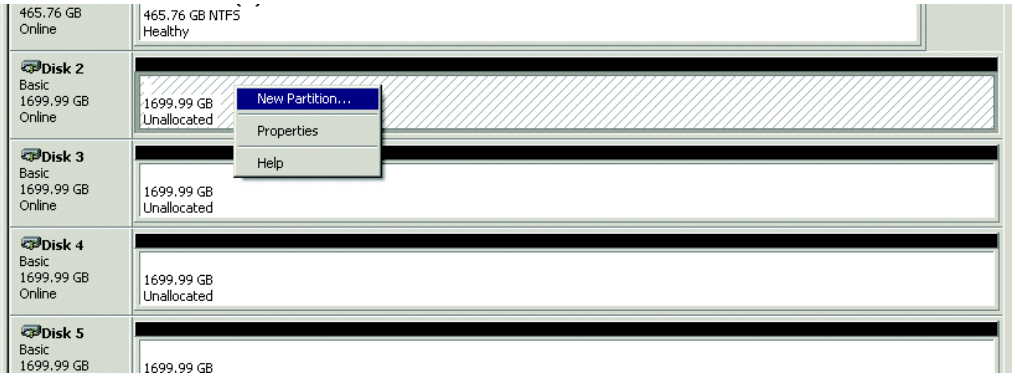

Figure 20. Unallocated Dynamic Drives

b. Perform a quick format.

(1) Click Next four times.

(2) Select the "Perform a quick format" check box.

(3) Click Next, and then click Finish.

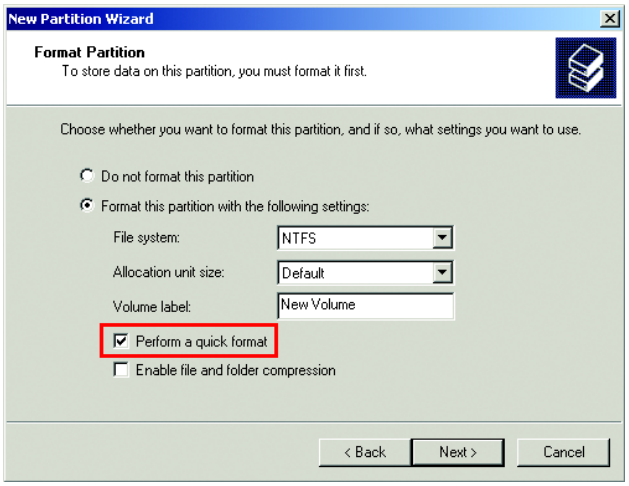

Figure 21. New Partition Wizard

12. Repeat step 11 until all unformatted disks are formatted. Once formatted, the disk status changes from Unallocated to Healthy.

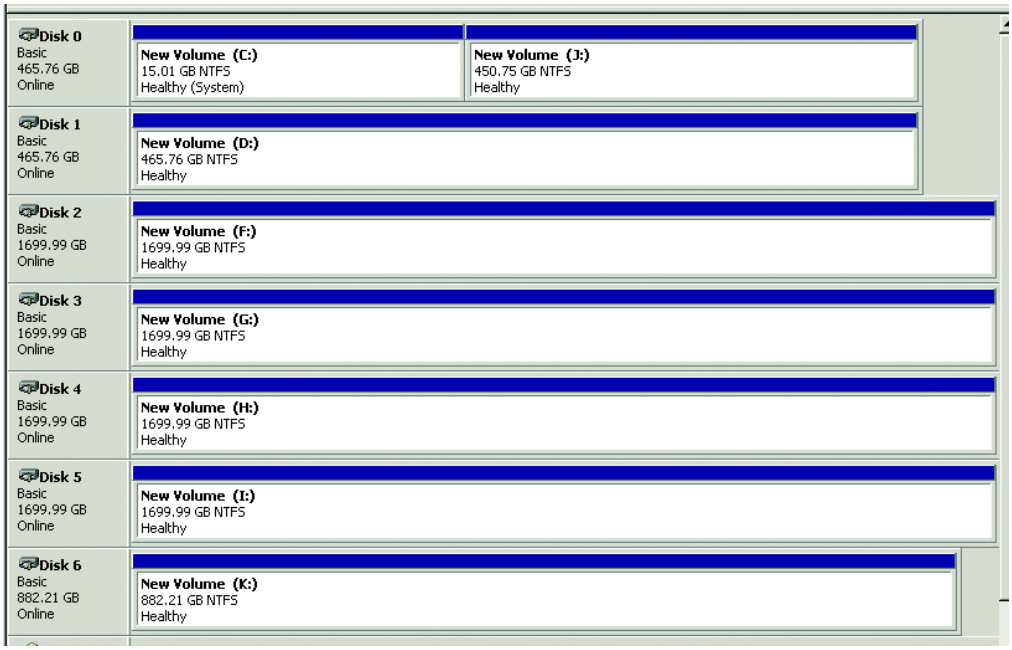

Figure 22. HDD Format Status

13. Perform one of the following options:
    - **Disable the DX8100 internal storage:** To store video data only on the DX8100HDDI, you must disable data from being stored on the DX8100's internal HDDs. To do this, perform steps 14 and 15.
    - **Use the DX8100 internal and DX8100HDDI external storage:** To store video data on the DX8100's internal HDDs and on the DX8100HDDI, go to step 15.

USING ONLY DX8100HDDI EXTERNAL STORAGE

14. Perform the following steps:

⚠ **WARNING:** Deleting a partition removes all recorded video data, which cannot be reversed or recovered.

a. Right-click the second partition of the first drive (usually labeled "D:"). A shortcut menu appears.

b. Click Delete Partition. The Delete dialog box appears (refer to Figure 23).

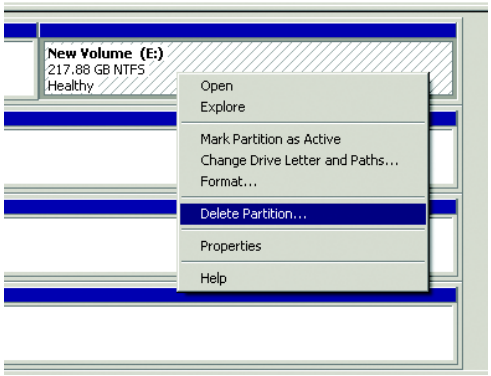

Figure 23. Delete Partition

c. Click Yes.

Repeat step 14 to delete all of the original active partitions (blue status bar) in step 11, but do not delete the partition labeled New Volume (C:).

15. Click Close to exit the Computer Management application.
16. Start the Allocation Management application.
    a. Go to Start > Run. The Run dialog box appears.
    b. In the Open drop-down box, type **allocreset**.
    c. Click OK.
17. The Security Warning dialog box appears. Click Run.

Figure 24. Security Warning

18. The Allocation Management dialog box appears. Click Re-Allocate.

Figure 25. Allocation Management

19. A completion message appears. Perform the following steps:
    a. Click OK.
    b. Go to Start > DX8100. The DX8100 application starts and the PDB Initialize dialog box appears.

20. If you are storing video data on the DX8100 internal HDDs and the DX8100HDDI, click the Recovery button.

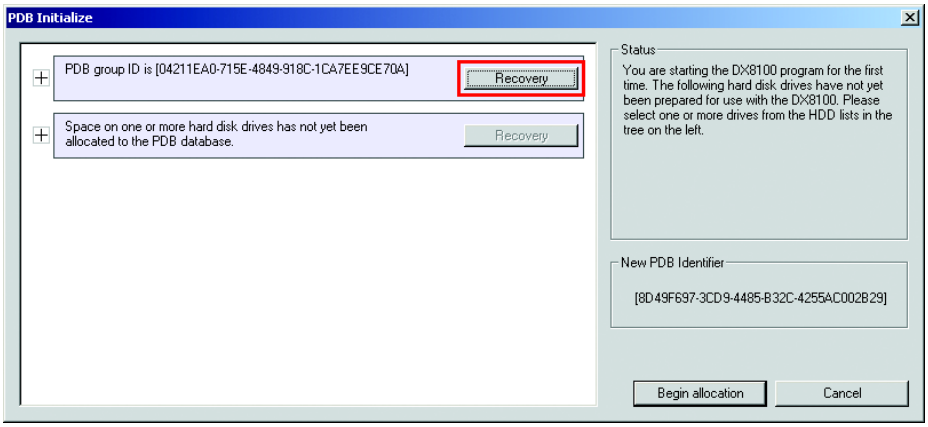

Figure 26. Selecting the Recovery Option

21. Click the plus (+) to display the available partitions.

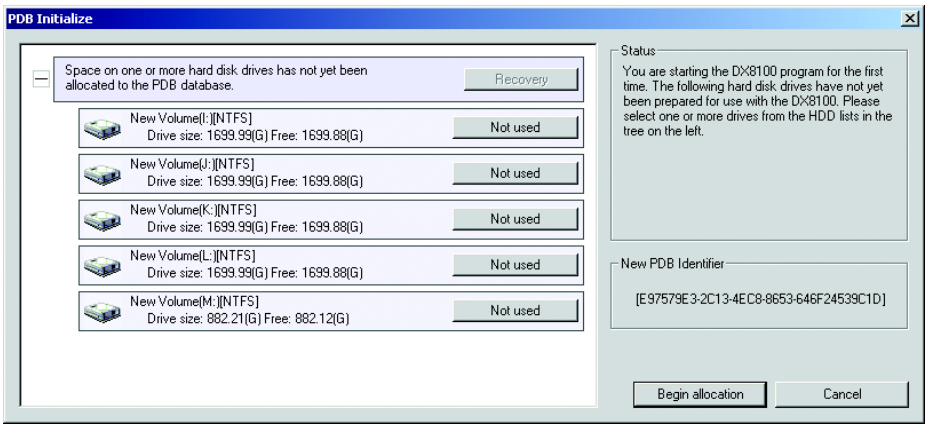

Figure 27. Viewing Available Partitions

22. Select the Allocate option on all partitions:
    a. Click the "Not used" button. A shortcut menu appears.
    b. Click Allocation.

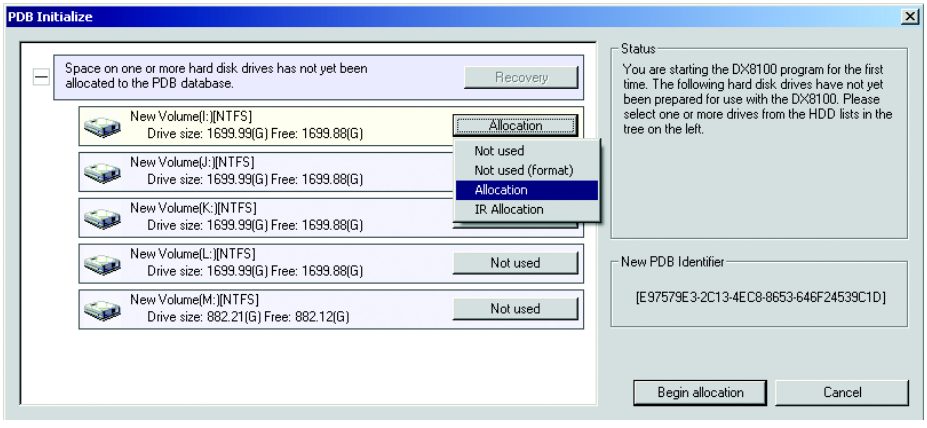

Figure 28. Selecting the Allocate Option

23. Repeat step 22 until all partitions are set to Allocation.

24. After all partitions are set to Allocation, click "Begin allocation."

25. When the warning message appears, click Yes. After all partitions are allocated, the DX8100 application automatically starts and begins recording data to the DX8100's internal storage (if not disabled) and to the DX8100HDDI.

Upgrading the DX8100HDDI HDD Storage Capacity

The DX8100HDDI must be reconfigured when upgrading the storage capacity.

⚠ **WARNING:** Adding additional drives to the DX8100HDDI to increase its storage capacity requires that the RAID array be deleted and rebuilt. Doing so *removes* all recorded video data, which cannot be reversed or recovered.

BACKING UP RECORDED VIDEO DATA (OPTIONAL)

1. Back up the video data stored on the DX8100HDDI. Refer to *Data Backup Setup* in the DX8100 Server Operation/Configuration manual (C2630M) or the online Help system.

DELETING THE RAID ARRAY

2. Shut down the DX8100.
   a. From the DX8100 menu bar choose File > Exit. The "Shut down" dialog box appears.
   b. Click "Shut down." The DX8100 shuts down.
3. Use one of the following methods to connect a PC to the DX8100HDDI:
   - Use a Cat5 network crossover cable to connect a PC to the RJ-45 connector on the DX8100HDDI rear panel.
   - Connect a PC to the same network as the DX8100HDDI.
4. To log on to the DX8100HDDI and obtain its IP address:
   a. On the DX8100HDDI front panel, press and hold ENT.
   b. To access the "View and Edit Config Params" menu, press the down arrow button six times, and then press ENT twice.
   c. Press the down arrow once and ENT twice to display the IP address for the DX8100HDDI. Note this address for step 6.
5. Perform the following steps from the PC (not the DX8100 or DX8100HDDI):
   a. Click Start > Run. The Run dialog box appears.
   b. In the Open drop-down box, type **cmd**.

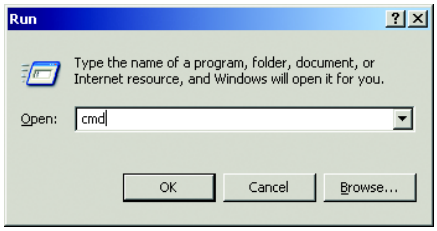

Figure 29. Run Dialog Box

   c. Click OK. The Command Prompt window appears.

6. At the command prompt, type **telnet** and the DX8100HDDI's IP address obtained in step 4c, and then press Enter.

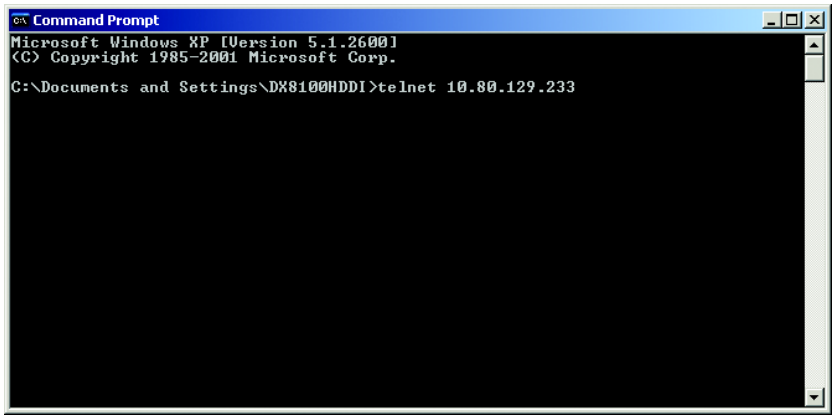

Figure 30. Entering the Telnet IP Address

7. When prompted for the password, press Enter again.
8. Press Esc on the keyboard to close any messages.
9. Select PC Graphic <ANSI Mode>, and then press Enter.

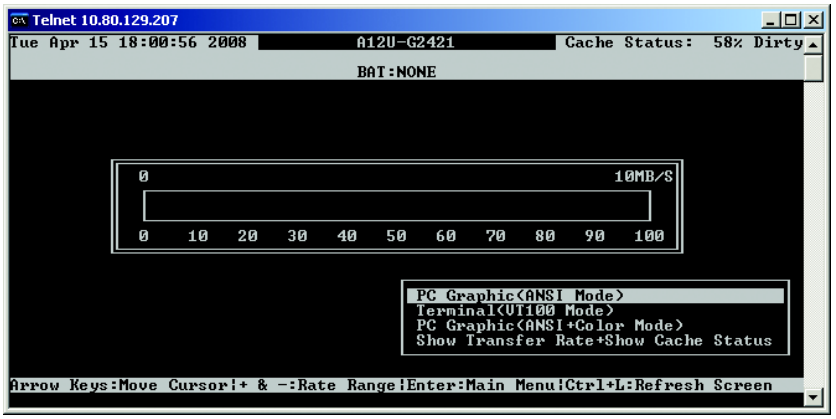

Figure 31. PC Graphic ANSI Mode

10. Unmap all partitions:
    a. Select "view and edit Host luns," and then press Enter. A shortcut menu opens and "CHL 0 ID 0" is highlighted.
    b. Press Enter to select "CHL 0 ID 0."
    c. Press Enter. When prompted to unmap Host Lun, choose Yes, and then press Enter again.
    d. Repeat step 10c until all active partitions are unmapped.

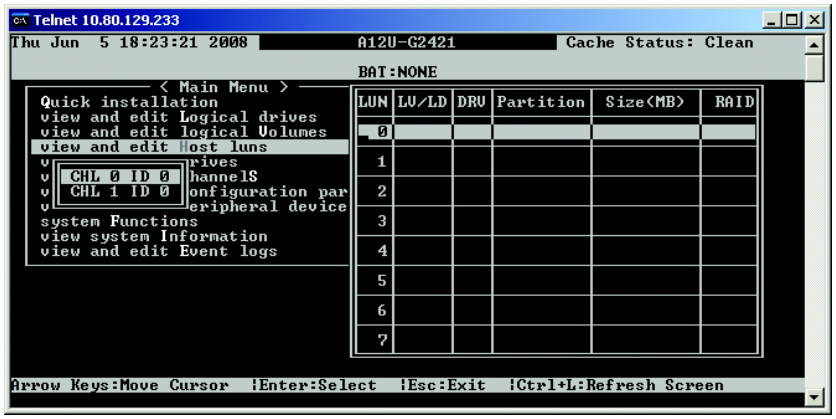

Figure 32. Unmapping Partitions

11. On the keyboard, press Esc twice to return to the Main Menu.
12. Select "view and edit Logical drives," and then press Enter.

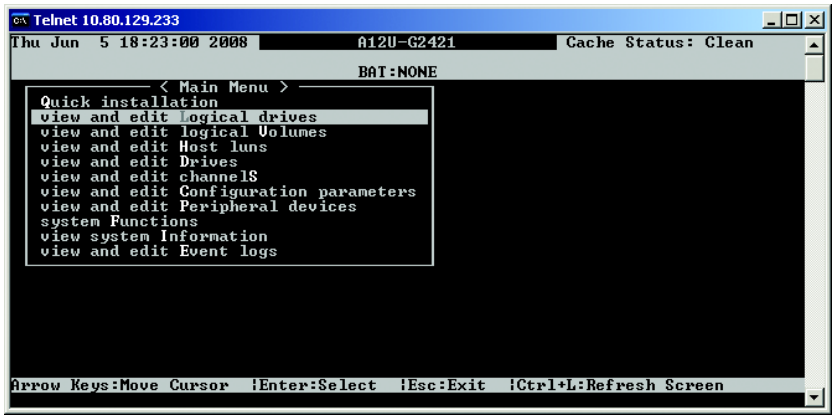

Figure 33. Main Menu

a. Verify that the active Logical Drive is selected, and then press Enter.

b. Choose "Delete logical drive," and then press Enter.

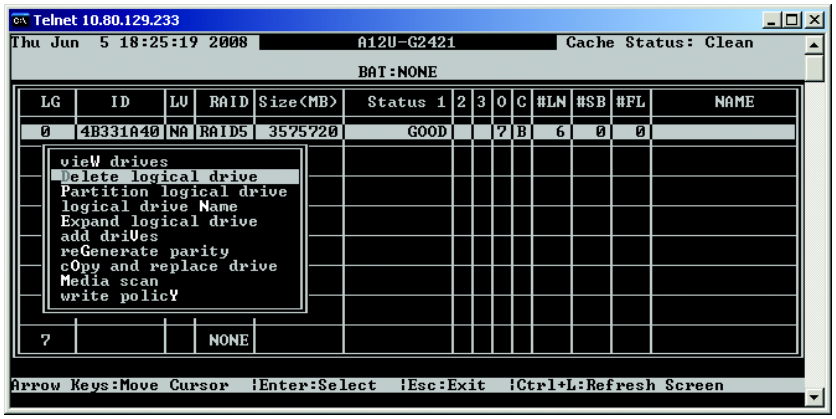

Figure 34. Delete Logical Drive

c. Select Yes on the shortcut menu, and then press Enter.

13. On the keyboard, press Esc twice to return to the Main Menu.

INSTALLING THE NEW HDDS

NOTE: You do not have to shut down the DX8100HDDI to install the new hard drives.

14. Install the new HDDs in the DX8100HDDI drive bays. For information about installing HDDs, refer to *Installing the DX8100HDDI Drive Trays* on page 15.

15. Verify that the DX8100HDDI status LEDs are flashing green and blue, indicating the drives are ready to be configured.

CREATING THE LOGICAL DRIVE

16. To access the Setup mode from the DX8100HDDI front panel:

    a. If the IP address is still displayed in the LCD, press ESC five times.

    b. Press and hold ENT for two seconds.

17. Press ENT to enter the Quick Logical Drive Install menu.

18. Press the down arrow to select RAID5.

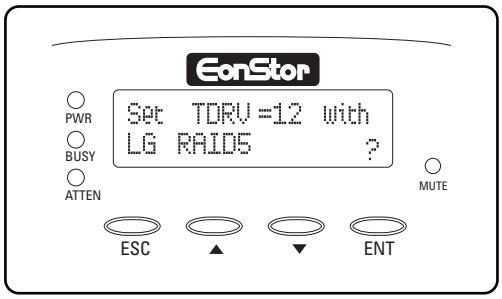

Figure 35. Quick Logical Drive Install

19. Press and hold ENT for two seconds to initialize the logical drive.

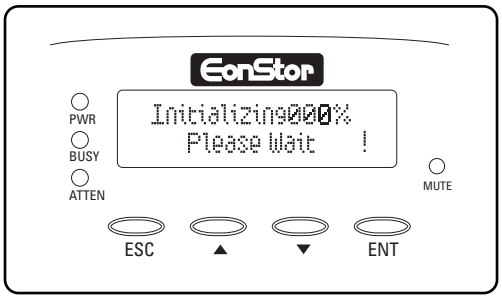

Figure 36. Initializing Logical Drive

UNMAP THE LOGICAL DRIVE

20. After the logical drive is initialized, press the down arrow three times until "View and Edit Host Luns" appears.

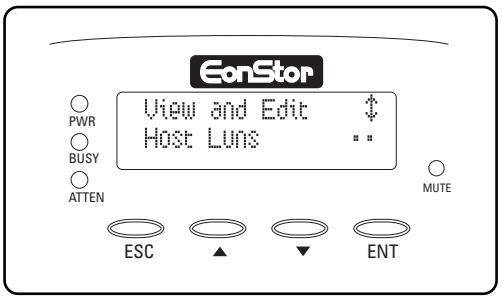

Figure 37. View and Edit Host Luns

21. Press ENT three times until Delete CH0 ID0 LUN=00 Mapping appears (refer to Figure 38).

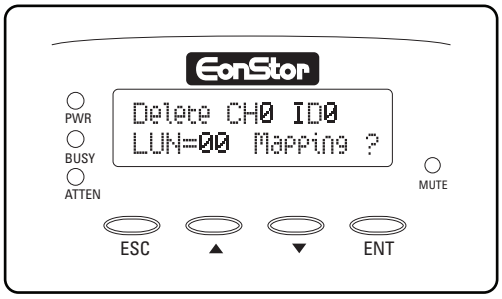

Figure 38. Delete LUN

22. Press and hold "ENT" for two seconds until you hear a beep.
23. From the DX8100HDDI front panel, press ESC twice to return to the main menu.

OBTAINING AN IP ADDRESS

24. Press the down arrow three times. The "View and Edit Config Params" menu appears.
25. Press Enter two times.
26. Press the down arrow once, and then press Enter two times. The IP address appears on the screen.

27. On the keyboard, press Esc to close any messages. The Main Menu appears.

28. Select PC Graphic <ANSI Mode>, and then press Enter.

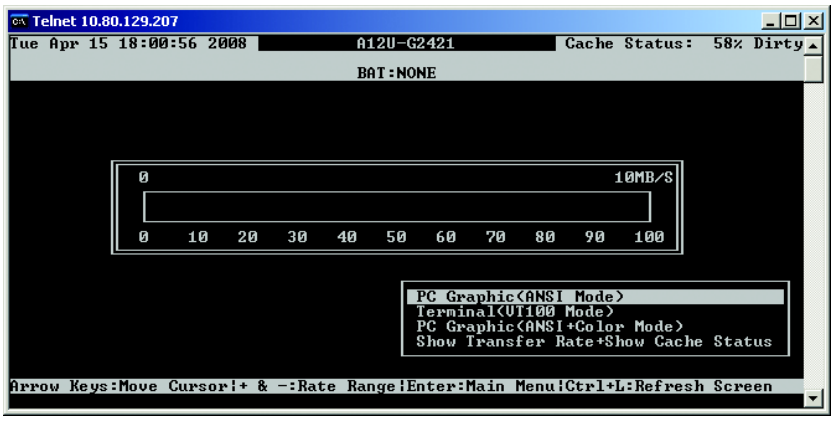

Figure 39. PC Graphic ANSI Mode

29. From the Main Menu, select "view and edit Logical drives," and then press Enter.

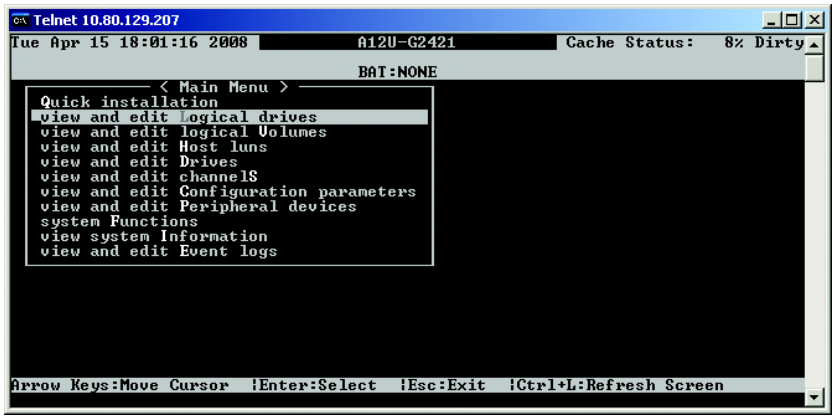

Figure 40. View and Edit Logical Drives

30. The first entry in the logical drives table is selected. Press Enter.

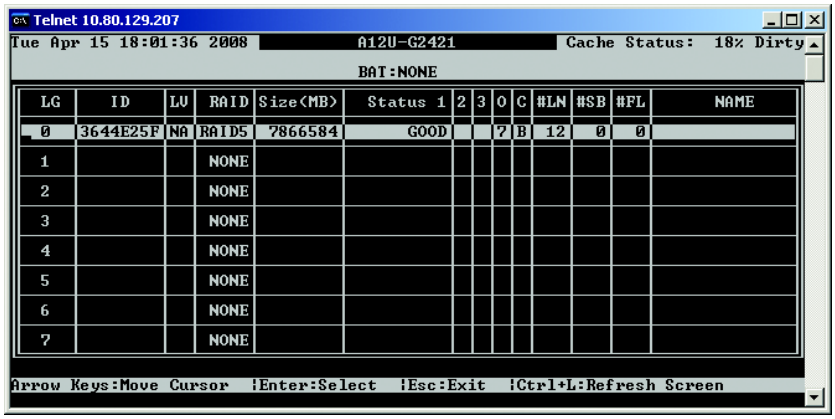

Figure 41. Logical Drives Screen

31. Select “Partition logical drive” on the shortcut menu, and then press Enter.

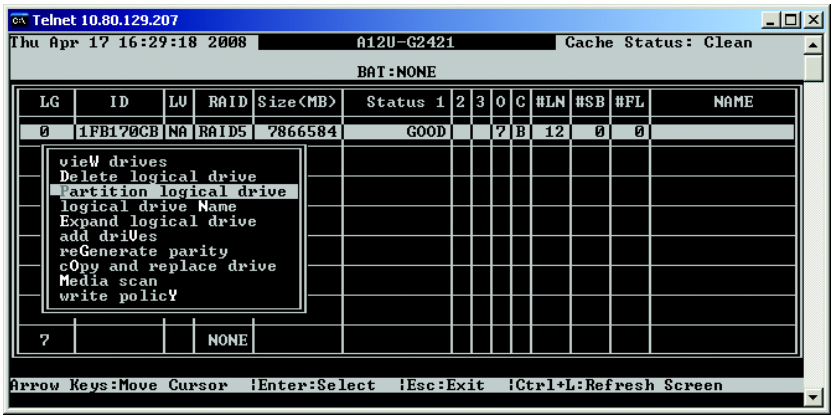

Figure 42. Partition Logical Drive

32. A warning message. Select Yes, and then press Enter.

Figure 43. Partition Logical Drive Warning

33. Set the partition size for the first logical drive:
    a. Select the logical drive you want to partition, and then press Enter.
    b. In the partition size text box, type **1740800**, and then press Enter.

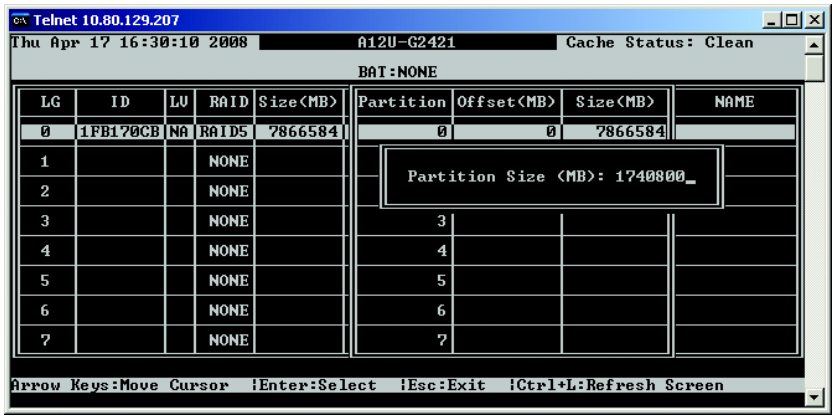

Figure 44. Select Logical Drives for Partitioning

c. A warning message appears. Select Yes, and then press Enter.

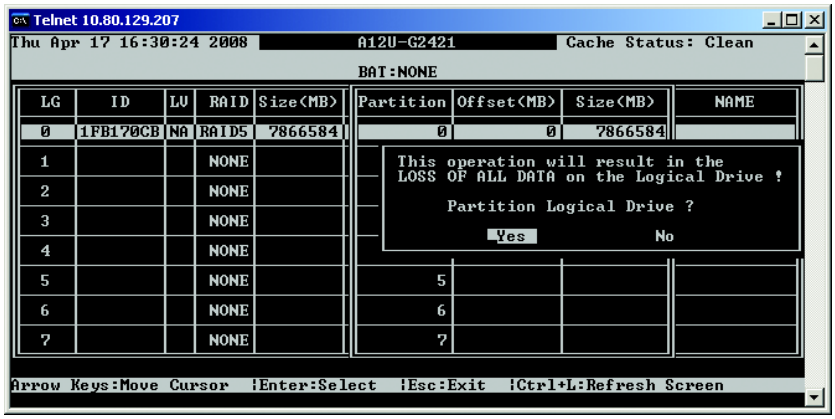

Figure 45. Starting the Partition Process

34. Set the partition size for the remaining logical drives:
    a. In the logical drives table, select the next logical drive in the list.
    b. Press Enter.
    c. In the partition size text box, type **1740800**, and then press Enter.
    d. A warning message. Select Yes, and then press Enter.

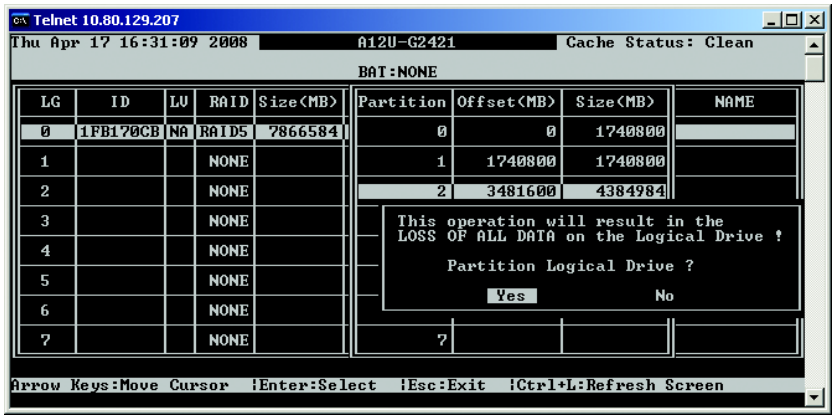

Figure 46. Partitioning the Next Drive

35. Repeat step 34 until the partition size of the last logical drive is less than 1740800.

    NOTE: A DX8100HDDI that is fully populated with twelve 750 GB drives will have five partitions.

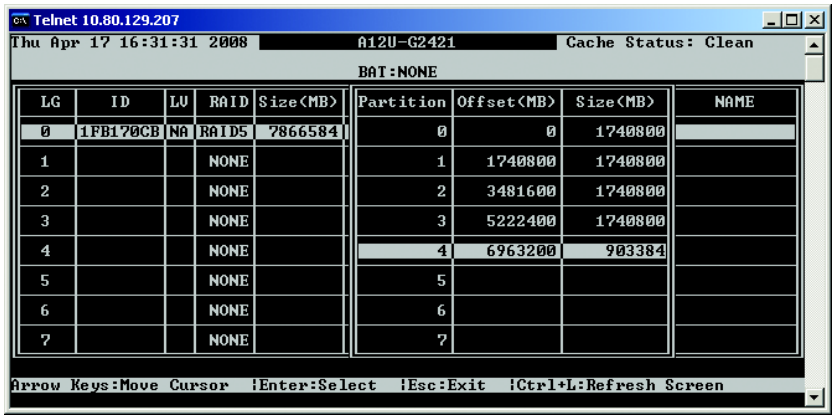

Figure 47. Results of a Partitioning Activity

36. To return to the Main Menu, on the keyboard, press Esc twice.

37. From the Main Menu, select “view and edit Host luns,” and then press Enter. A shortcut menu appears.

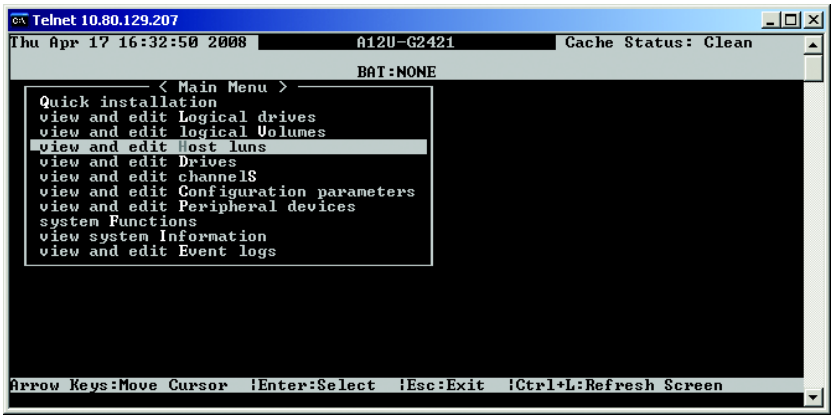

Figure 48. Main Menu

38. Select “CHL 0 ID 0” and press Enter. A second shortcut menu appears.

39. Select Logical Drive, and then press Enter.

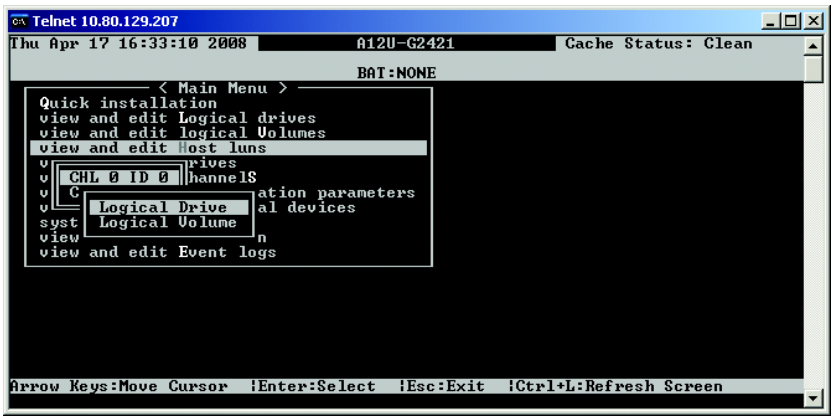

Figure 49. Selecting a Logical Drive

40. Press Enter four times.

41. The Map Logical Drive prompt appears. Select Yes, and then press Enter.

Figure 50. Accepting LUN 0 (Zero) Mapping Settings

42. Select LUN 1, and then press Enter twice.

43. Select the next available partition, and then press Enter twice.

NOTE: Mapped partitions are indicated by an asterisk (*) in the partition column.

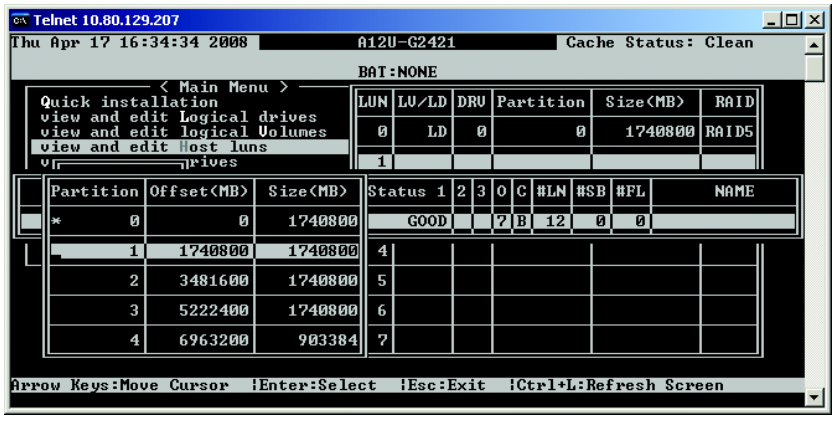

Figure 51. Selecting the Next Partition

44. Select Yes at the Map Logical Drive prompt, and then press Enter.

Figure 52. Accepting LUN 1 Mapping Settings

45. Repeat steps 42 to 44 until all partitions are mapped.

46. After all partitions are mapped, press Esc on the keyboard to return to the Main Menu, and then close the command prompt.

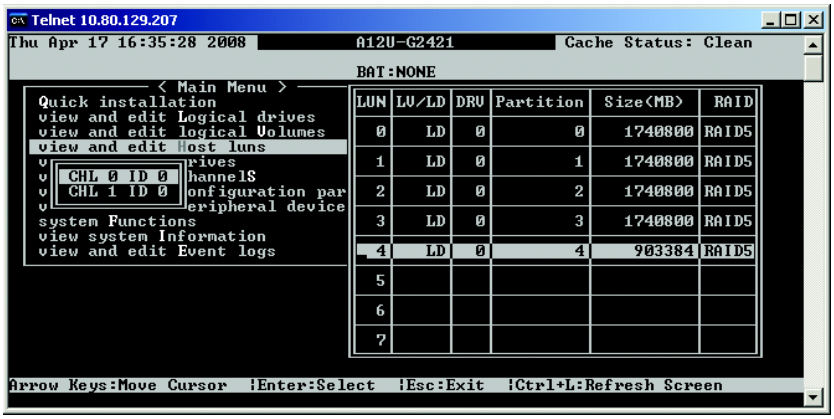

Figure 53. LUN Mapping

FORMATTING THE DRIVES

47. Return to the DX8100HDDI front panel and press ESC five times. The Ready status appears in the LCD window.
48. Make sure the DX8100 is still connected to the DX8100HDDI, and turn on the DX8100. The DX8100 application window appears.
49. Access the Windows operating system on the DX8100:
    a. Log on to the DX8100.
    b. From the DX8100 menu bar, choose File > Exit. The “Shut down” dialog box opens.
    c. Click “Exit to Windows.”
    d. Click OK. The “Log On to Windows” dialog box opens.
    e. Enter the Windows password and click OK. The system logs you on to the Windows operating system.
50. Start the DX8100 Computer Management Utility:
    a. Go to Start > Run. The Run dialog box appears.
    b. In the Open drop-down box, type **compmgmt.msc**, and then click OK.
51. When the Computer Management window appears, click Disk Management. The “Initialize and Convert Disk Wizard” appears.
    a. Click Next, and make sure all disks are selected in the Disks area.
    b. Click Next again. All disks should still be selected.
    c. Click Next, and then click Finish.
52. Disk status appears in the contents pane. For this example, there are five unallocated dynamic drives. Perform the following steps:
    a. Right-click a disk in the Disk status pane (one that is labeled Dynamic). A shortcut menu appears.
    b. Select “Convert to Basic Disk.”
53. Repeat step 52 until all unallocated drives are converted to the Basic status.
54. Configure any unallocated drives:
    a. Right-click the first unformatted disk in the contents pane (labeled Unallocated). A shortcut menu appears.
    b. Click New Partition.

55. To perform a quick format:
    a. Click Next four times.
    b. Click the "Perform a quick format" check box.
    c. Click Next, and then click Finish.
56. Repeat step 54 until all drives are formatted. Once formatted, the disk status changes from Unallocated to Healthy.
57. Click Close to close the Computer Management application.

ALLOCATING THE NEW DX8100HDDI DRIVES

58. Start the DX8100 Allocation Management application:
    a. Go to Start > Run. The Run dialog box appears.
    b. In the Open drop-down box, type **allocreset**.
    c. Click OK.
59. The Security Warning dialog box appears. Click Run.
60. The Allocation Management dialog box appears. Click Re-Allocate.
61. A completion message appears. Perform the following steps:
    a. Click OK.
    b. Go to Start > DX8100. The DX8100 application is launched and the PDB Initialize dialog box appears.
62. Click the plus (+) to display the available partitions.
63. Select the Allocate option on all partitions:
    a. Click the "Not used" button. A shortcut menu appears.
    b. Click Allocation.
64. Repeat step 63 until all partitions are set to Allocation.
65. After all partitions are set to Allocation, click "Begin allocation."
66. When the warning message appears, click Yes. After all partitions are allocated, the DX8100 application automatically starts and begins recording data to the DX8100's internal storage (if not disabled) and to the DX8100HDDI.

Specifications

ELECTRICAL

Input Voltage	100 VAC (at 6 A) to 240 VAC (at 3 A) ±10%, 50/60 Hz, with PFC (autoswitching)
Cable Type	2 USA (117 VAC), 2 European (220 VAC), 2 UK (250 VAC) All, 3 prongs, molded connector, 6 ft (1.8 m) cord
Power Consumption	Maximum 720 W

MECHANICAL

Connectors	
VHDCI	2 Ultra SCSI ports
Stereo Mini Jack	COM 1
RJ-45	10/100 Mbps Ethernet

GENERAL

Operating Temperature	32° to 104°F (0° to 40°C)
Relative Humidity	Maximum 95%, noncondensing
Dimensions	
Desktop	19.3" D x 17.6" W x 3.5" H (49.02 x 44.70 x 8.89 cm)
Rack Mount	19.9" D x 19.0" W x 3.5" H (2RUs) (50.55 x 48.26 x 8.89 cm)
Unit Weight	66.3 lb (30.07 kg) maximum (fully equipped, 12 drives)
Shipping Weight	73 lb (33.02 kg) maximum (fully equipped, 12 drives)

(Design and product specifications subject to change without notice.)

PRODUCT WARRANTY AND RETURN INFORMATION

WARRANTY

Pelco will repair or replace, without charge, any merchandise proved defective in material or workmanship **for a period of one year** after the date of shipment.

Exceptions to this warranty are as noted below:

- Five years on fiber optic products and TW3000 Series unshielded twisted pair (UTP) transmission products.
- Three years on Spectra® IV products.
- Three years on Genex® Series products (multiplexers, server, and keyboard).
- Three years on DX Series digital video recorders, DVR5100 Series digital video recorders, Digital Sentry® Series hardware products, DVX Series digital video recorders, NVR300 Series network video recorders, and Endura® Series distributed network-based video products.
- Three years on Camclosure® and Pelco-branded fixed camera models, except the CC3701H-2, CC3701H-2X, CC3751H-2, CC3651H-2X, MC3651H-2, and MC3651H-2X camera models, which have a five-year warranty.
- Three years on PMCL200/300/400 Series LCD monitors.
- Two years on standard motorized or fixed focal length lenses.
- Two years on Legacy®, CM6700/CM6800/CM9700 Series matrix, and DF5/DF8 Series fixed dome products.
- Two years on Spectra III™, Spectra Mini, Esprit®, ExSite®, and PS20 scanners, including when used in continuous motion applications.
- Two years on Esprit and WW5700 Series window wiper (excluding wiper blades).
- Two years (except lamp and color wheel) on Digital Light Processing (DLP®) displays. The lamp and color wheel will be covered for a period of 90 days. The air filter is not covered under warranty.
- Two years on Intelli-M® eIDC controllers.
- One year (except video heads) on video cassette recorders (VCRs). Video heads will be covered for a period of six months.
- Six months on all pan and tilts, scanners, or preset lenses used in continuous motion applications (preset scan, tour, and auto scan modes).

Pelco will warrant all replacement parts and repairs for 90 days from the date of Pelco shipment. All goods requiring warranty repair shall be sent freight prepaid to a Pelco designated location. Repairs made necessary by reason of misuse, alteration, normal wear, or accident are not covered under this warranty.

Pelco assumes no risk and shall be subject to no liability for damages or loss resulting from the specific use or application made of the Products. Pelco's liability for any claim, whether based on breach of contract, negligence, infringement of any rights of any party or product liability, relating to the Products shall not exceed the price paid by the Dealer to Pelco for such Products. In no event will Pelco be liable for any special, incidental, or consequential damages (including loss of use, loss of profit, and claims of third parties) however caused, whether by the negligence of Pelco or otherwise.

The above warranty provides the Dealer with specific legal rights. The Dealer may also have additional rights, which are subject to variation from state to state.

If a warranty repair is required, the Dealer must contact Pelco at (800) 289-9100 or (559) 292-1981 to obtain a Repair Authorization number (RA), and provide the following information:

1. Model and serial number
2. Date of shipment, P.O. number, sales order number, or Pelco invoice number
3. Details of the defect or problem

If there is a dispute regarding the warranty of a product that does not fall under the warranty conditions stated above, please include a written explanation with the product when returned.

Method of return shipment shall be the same or equal to the method by which the item was received by Pelco.

RETURNS

To expedite parts returned for repair or credit, please call Pelco at (800) 289-9100 or (559) 292-1981 to obtain an authorization number (CA number if returned for credit, and RA number if returned for repair) and designated return location.

All merchandise returned for credit may be subject to a 20 percent restocking and refurbishing charge.

Goods returned for repair or credit should be clearly identified with the assigned CA or RA number and freight should be prepaid.

6-20-08

Green The materials used in the manufacture of this document and its components are compliant to the requirements of Directive 2002/95/EC.

This equipment contains electrical or electronic components that must be recycled properly to comply with Directive 2002/96/EC of the European Union regarding the disposal of waste electrical and electronic equipment (WEEE). Contact your local dealer for procedures for recycling this equipment.

REVISION HISTORY

Manual #	Date	Comments
C3648M	7/08	Original version.

Worldwide Headquarters
3500 Pelco Way
Clovis, California 93612 USA

USA & Canada
Tel: (800) 289-9100
Fax: (800) 289-9150

International
Tel: +1 (559) 292-1981
Fax: +1 (559) 348-1120

www.pelco.com

ISO**9001**

Australia | Finland | France | Germany | Italy | Macau | The Netherlands | Russia | Singapore
South Africa | Spain | Sweden | United Arab Emirates | United Kingdom | United States